Long. tota $5 \cdot 0$, alæ $2 \cdot 7$, caudæ $2 \cdot 5$ poll. Angl.
Hab. In Nova Granada interiore.
Obs. Similis B. coronato Tschudii, sed crista flava nec castanea et gula cinerea nec albicante distinguendus.

This Basileuterus makes the eighteenth species of this pretty group of Muiotiltidee now in my collection, seventeen having been already registered in my 'Catalogue of American Birds.' I may take this opportunity of remarking that the locality therein attributed to $B$. uropygialis (as also in these 'Proceedings,' 1861, p. 128) is, no doubt, erroneous. Relying on the correctness of M. Verreaux's labels, I have hitherto considered this to be a Brazilian species; but Mr. O. Salvin has recently received specimens of the same bird from Panama, and I have no doubt that that is its correct patria.
2. Thripophaga guttuligera, sp . nov.

Brunnescenti-olivacea, pileo nigricante, dorsi plumis striis medialibus ochraceis, quasi celatis: alis nigris, rufo limbatis: cauda unicolore castanea: subtus brunnescenti-olivacea, ochraceo crebre guttulata, plumis ochraceis, fusco circumcinctis; gula omnino ochracea: rostro superiore corneo, inferiore flavo; pedibus clare brunneis : subalaribus rufescenti-ochraceis.
Long. tota $5 \cdot 5$, alæ $2 \cdot 5$, caudæ $2 \cdot 5$, tarsi $\cdot 75$.
Hab. In Nova Granada interiore.
Obs. Aff. T. striolate ex Brasilia, sed crassitie multo minore et colore capitis obscuriore.

This little Dendrocolaptine might be arranged either as a Thripophaga or as a Heliobletus, and serves to connect these not very strongly distinguished forms. Its general structure is exactly that of Thripophaga striolata, but it is not much larger than the diminntive Heliobletus superciliosus. In the latter bird, however, the bill is proportionately rather shorter and straighter.

April 26, 1864.

John Gould, Esq., F.R.S., in the Chair.

The Secretary read the following extract from a letter addressed by George Latimer, Esq., Austrian Consul at Porto Rico, to Lieut.Col. C. P. Cavan, F.Z.S., and stated in relation thereto that he had obtained the necessary permit from the R. M. Steam Company for the conveyance of a tauk from St. Thomas's to Southampton:-

"St. John's, Porto Rico.

"As you are a Fellow of the Zoological Society, in whose collection, in their Gardens in the Regent's Park, I know you take great interest, I write to inquire if the Society would like to have a specimen or specimens of the Manatus or Manatee, commonly called the 'Sea Cow;' and if so, then for it to obtain a standing order from
the Directors of the Royal Mail Steam Company to the commanders of their ships which may call here, to receive the same on board in a tank which I would have prepared for their conveyance to England. These animals eat grass, and there will be no great trouble in carrying them safely : the most would be in changing the water every day; but on board a steamer, with pumps and hose, that would be next to nothing. I have at present two specimens of the Manatee (a male and a female), which I keep in a large tank with holes in the sides and bottom (open at top), so as to admit the flow of water. Thus I have no trouble in keeping them. They are curions creatures, and respectively $8 \frac{1}{2}$ and $6 \frac{1}{2}$ feet long by $3 \frac{1}{2}$ and 3 feet broad, and $4 \frac{1}{2}$ feet and $3 \frac{1}{2}$ feet in diameter at the broadest part, weighing about 500 and 350 lbs . Those I now have I have offered to the Commissioners of the Central Park in New York; but if your Society would like specimens, I shall have great pleasure in trying to procure them. I have a second tank now ready, and have told all the fishermen, should any more be taken, not to kill them, but to bring them to me, and that I will pay them their full value. They are usually killed; and the meat, which resembles beef or rather veal, is much sought after by the lower class of people; the skin also has many (supposed) virtues. They are caught in the 'corals' made for catching fish, at the mouths of the rivers emptying into this harbour."

The Secretary announced that Mr. James Thompson, the Society's Head Keeper, had reached Calcutta by the 'Hydaspes' in safety, and that he had been singularly successful in taking out the birds presented by the Society to the Baboo Rajendra Mullick, having delivered them all alive and in firstrate condition, with the exception of a single Curassow.

Mr. Fraser exhibited two pairs of Horns, male and female (belonging to Capt. Stewart, now in India, but lent by Mr. Lillicrapp), of that extremely rare and extraordinary Ruminant, the Budorcas taxicolor, Hodgson, described in the 'Journal of the Asiatic Society of Bengal' (vol. xix. p. 65, pls. 1, 2, 3, 1850).

The Sccretary read the following extracts from a letter addressed to him by Mr. R. Swinhoe, F.Z.S., dated Formosa, February 9th, 1864:-
"As I passed through Amoy, I was so fortunate as to secure for the Society a pair of Dampier Straits Pigs (wild species), a Sumatran Jungle-Cock (Gallus furcatus), and a Mantchurian Deer, apparently of a new species, intermediate between Cervus sika of Japan and the Cervus taivanus. It was procured at Newchwang. These four animals I transmit to Hong Kong for transmission to England, and I hope they may eventually reach the Society all safe. At Hong Kong I saw a pair of the large Summer-Palace Deer, heads of which were exhibited to the Society by Mr. Leadbeater, and which Dr. J. E. Gray pronounced to be identical with Cerrus elaphus of Europe. The pair in Hong Kong were two years old, and an inspection of them convinced me, from their similarity to the older and larger
specimens procured by Col. Sarel in the Summer Palace Grounds, that the large form is quite distinct from the small one, which last Dr. Gray identified as the C. pseudaxis of certain French authors. At the time I fully believed that the smaller one with indistinct spots was merely the miniature of the larger animal. I now agree with Dr. Gray in considering it distinct, but cannot believe that it is to be referred to the C. pseudaxis. C. pseudaxis is from the Malayan archipelago, whence I have frequently heard of spotted $A x i s$-like Deer.
"The three skins of two bucks and one doe that I sent home are now in the British Museum, and the oldest buck has been figured in the 'Proceedings' of the Society for 1861. I should think C. hortulorum would be an appropriate name. In the gardens of Messrs. Jardine, Matheson, and Co. in Hong Koug I saw several bucks and does of C. sika and C. taivanus, as also of C. axis in winter dress. The bucks of the two former had manes about the neck; C. sika was spotless, $C$. taivanus with indistinct spots, while $C$. axis was of a rich yellowish-brown colour, with distinct white spots. The latter had long, thin, reddish tails, and, I think, are identical with the true C. axis. They are from Hankow, interior China. The bucks of $C$. sika, otherwise similar, differed a good deal in size; they were, I believe, from different islands of Japan, the smaller from Nippon, the larger from Yesso.
"The Deer from China may therefore thus be enumerated, as follows:-
"Cervus dama, L. In gardens at Canton.
"O. axis, L. From Hankow, Central China.
"C. elaphus, L. Summer Palace Gardens.
"C. wallichii. Tartary, beyond the Great Wall (horns seen by me at Peking).
"C. swinhoii, Sclater. Island of Formosa.
"C. hortulorum, Swinhoe ("C. pseudaxis?", Gray). Gardens of Summer Palace.
"C. taivanus, Blyth. Island of Formosa.
" $C$. sika. Island of Japan.
" $C$. mantchuricus. Mantchuria. Size larger than C. taivanus, with horns short in the stem, and more resembling those of $C$. sika. Colouring very similar (in winter coat) to that of C. taivanus. Red patch on occiput, on each shoulder, and on side of neck. Black line down back somewhat indistinct ; mane from side and back of neck rather long, thick, shaggy, and dark-coloured. Belly pale reddish white. Thighs light reddish brown."

Dr. Sclater exhibited a series of bird-skins, being a selection from the collection made by the Rev. H. B. Tristram's expedition in Palestine; and called particular attention to the following species, considered by Mr. Tristram to be new to science :-
(1.) Passer moabiticus, Tristram.

Ex cinereo isabellinus, tectricibus alarum late castaneis : super-
ciliis et dorso medio cum remigum et rectricum marginibus rufescenti-isabellinis: dorso medio nigro striato : gutture medio cun cervice nigris; macula suboculari et gutturis vitta utrinque laterali albis: macula cervicali utrinque fava: ventre albo, crisso rufescente : rostro superiore plumbeo, inferiore cum pedibus flavis.
Long. tota $3 \cdot 8$, alæ $2 \cdot 3$, caudæ $1 \cdot 8$ poll. Angl.
(2.) Caprimulgus tamaricis, Tristram.

Cinerascenti-isabellinus, nigro minute vermiculatus: fascia collari postica et maculis humeralibus rufescenti-isabellinis : mento et fascia gulari albis : alarum primariis nigris, vitta lata alba; secundariis rafis, nigro transfasciatis : alis intus et tectricibus subalaribus pallide rufis: cauda rectricibus duabus utrinque externis pallide rufis, nigro frequenter et irregulariter transfasciatis, apicibus late albis; ceteris dorso concoloribus.
Long. tota $9 \cdot 0$, alæ $5 \cdot 6$, caudæ $4 \cdot 2$.
The following papers were read:-

## 1. Note on the Bonnet of the Right Whale. By Dr. J. E. Gray, F.R.S., F.L.S.

Mr. Holdsworth has presented to the British Museum a specimen which had been received from an American whaler, as "the Bonnet of Balana mysticetus, obtained at the Sandwich Islands."

I have shown the specimen to Professor Owen. He states that a similar specimen is in the Museum of the College of Surgeons, and that he considers it as "a diseased action or tumour of the outer layers of integument."


The specimen is oblong, 11 inches long, and 8 inches wide, very irregular in the outline, with a very rough pitted surface, four of the pits being much larger than the rest, and dividing the surface into six prominences. The whole substance seems to be formed of irregular horny layers placed one under the other, the lowest layer being the one last formed, and each of these layers is more or less crumpled and plicated on the surface, giving the irregular appearance to the mass.

The lower layer is attached to the skin of the whale, a part of the is called.

On showing the specimen to a foreign zoologist, he stated that it was an excrescence on the skin of a whale, formed by the adhesion of the barnacles called Coronula, and that the irregularities on the surface of the bonnet were caused by the attachment and wearingaction of these animals.

This is quite a mistake, the Coronula sink themselves into the epidermis of the whale, as is also the case with the genus Tubicinella. I have seen numerous specimens of both these animals in situ, and the skin round the cirhipedes is scarcely altered in structure, and offers no resemblance to the horny excrescence called the bonnet. Any one who examines the bonnet will find that the plate of horn of which it is formed is plicated and folded when deposited; and this explains the irregularity of the general form of the body.

The zoologist referred to has since said that he believes it is caused by the irritation of the whale-louse, and that the irregularities on the surface are caused by them. This may perhaps have arisen from the surface of the specimen being corered with whale-lice when it was first procured from the whaler; but this may be only because the hollow on the surface forms a good hiding for them; and I think the supposition that they are the origin of the wart or horn requires firther observation.
Mr. Holdsworth has since sent to the Museum a much smaller specimen, also obtained at the Sandwich Islands, which is oblong, elongate, and more symmetrical; but the upper surface is not so evenly channelled. It is 6 inches long and $2 \frac{1}{2}$ wide. It is spoken of by the whalers as a wart on the tip of the nose, and is commonly called the "Whale's bonnet."

I do not recollect observing any account of this "bonnet," or giant corn, or rudimentary frontal horn, as it may be regarded in any account of the "Right Whale," nor in that of the "Spermaceti Whale." I have specially searched for it again in the works by persons who have seen these Whales alive, but without success.

It has been suggested by Mr. Holdsworth that the bonnet may be a natural development, and possibly characteristic of the species; he thinks that the "pale prominence"" on the nose of Balcena ant. arctica, as figured in 'Fauna Japonica,' pls. 28 \& 29, may be intended to represent it. In the description this part is only described as "une forte proéminence teinte de blanc."

In the excellent drawing of the male Whale from the coast of New Zealand, which I figured under the name of Balana antipodarum, in Dieffenbach's 'New Zealand,' vol. ii. t. 1, there is a rough roundish prominence on the front of the lower jaw, as well as on the front of the upper one.

I believe that a prominence of the kind is to be observed in all the species of the genus Balcena, although I have never seen them described as hard and horny; but that is no reason why this may not be the case.
2. List of a Collection of Birds procured by Mr. George H. White in the vicinity of the City of Mexico. By P. L. Sclater, M.A., Ph.D., F.R.S., Secretary to the Society.

Mr. George II. White has lately placed in my hands for examination a series of bird-skins which were obtained during his recent residence in the city of Mexico by several collectors in the vicinity of the capital. The majority of them are from the valley of Mexico and the neighbouring hills in the immediate vicinity of the city, but some probably are from the tierra caliente.

As this is the first collection of birds from this locality that has come under my notice, I have had great pleasure in examining it with care, and drawing up the following list of the species which it contains. These amount to 156 in number, and amongst them are several additions to the Mexican avifauna, concerning which I have added a few remarks.

The nomenclature employed for the Passeres, Fissirostres, and Scansores is that of my 'Catalogue of American Birds;' in the other orders I have mostly followed 'Baird's Birds of North America.'

Fam. Turdide.

1. Catharus mexicanus ( $\mathrm{B} p$.).
2. Turdus assimilis, Cab.
3. T. grayi, Bp.
4. T. migratorius, Lim.
5. T. pinicola, Sclater.
6. Marporhynchus longirustris (Lafr.).

Fam. Sylviide.
7. Regulus calendula (Linn.).

Fam. Paride.
8. Psaltriparus melanotis (Hartl.).

Fam. Troglodytide.
9. Catherpes mexicanus (Sw.).
10. Cistothorus palustris (Wils.).

Fam. Mniotiltide.
11. Dendrgca auduboni (Townsh.).
12. D. estiva (Gm.).
13. Mniotilta varia (Lim.).
14. Setophaga ruticilla (Limi).
15. S. miniata, Sw.
16. Cardellina rubra, Sw.

Fam. Hirundinide.
17. Hirundo horreorum, Barton.
18. Petrochelidon thalassina (Sw.).

Fam. Vireonide.
19. Icteria viridis (Gm.).
20. Cyclorhis flaviventris, Lafr.

Fam. Laniide.
21. Lanius excubitoroides, Sw. : Baird, B. N. A. p. 327.

Having now a North-American specimen of the true L. ludovicianus, I am enabled to state that the Mexican bird, which in my catalogue (p. 46) I have called mexicanus, is L. excubitoroides, as distinguished by Prof. Baird from L. ludovicianus. Mr. White's specimen agrees with mine.

Fam. Ampelide.
22. Ampelis cedrorum (Vieill.).
23. Phainopepla nitens (Sw.).
24. Ptilogonys cinereus, Sw.

Fam. Cerebide.
25. Diglossa baritula, Wagler.
26. Cereba carneipes, Sclater.

Fam. Tanagride.
27. Chlorophonia occipitalis (Du Bus).
28. Euphonia elegantissima (Bp.).
29. Tanagra abbas, Licht.
30. T. diaconus, Less.
31. Pyranga hepatica, Sw.
32. P. erythrocephala, Sw.
33. P. erythromelena (Licht.).
34. Phenicothraupis rubicoides (Lafr.).
35. Buarremon albinuchus (D'Orb. et Lafr.).
36. B. brunneinuchus (Lafr.).
37. Saltator atriceps, Less.
38. S. magnoides, Lafr.
39. S. grandis (Licht.).
40. Pitylus celeno (Licht.).

## Fam. Fringillide.

41. Hedymeles ludovicianus (Lim.).
42. H. melanocepialus (Sw.).
43. Guiraca carulea (Lim.).
44. Volatinia jacarina (Limm.).
45. Phonipara pusilla (Sw.).
46. Cyanospiza cyanea (Linn.).
47. Junco cinereus (Sw.).
48. Spizella socialis (Wils.).
49. Zonotrichia leucophrys (Forst.).
50. Melospiza fallax, Baird.

This specimen agrees with a Californian specimen in my collection (no. 684 a), which I believe must be referred to M. fallax; but I have not yet had the advantage of comparing it with authentically determined specimens of Prof. Baird's species.
51. Chondestes grammaca (Say).
52. Plectrophanes melanomus, Baird.
53. Loxia americana (Wils.).

This is the second specimen I have examined of a Crossbill from Mexico. In this example the bill is scarcely larger than in a specimen of L. americana from Nova Scotia, and I see little reasou for keeping the so-called Loxia mexicana distinct, althongh in the Mexican bird the coloration is certainly rather brighter, and general size rather larger, than that of northern specimens.
54. Chrysomitris notata (Du Bus).
55. C. pinus (Wils.).

Fam. Alaudide.
56. Eremophila chrysolema (Wagl.).

Fain. Icteride.
57. Cassiculus frevosti (Less.).
58. Icterus baltimore (Linu.).
59. I. abeillif (Less.).
60. I. affinis (Lawr.).
61. I. cucullatus (Sw.).
62. I. parisorum, Bp.
63. I. auduboni, Giraud.
64. Ageleus gubernator (Wagl.).
65. Xanthocephalus icterocephalus (Bp.).
66. Sturnella mexicana, Sclater.
67. Quiscalus macrurus, Sw.
68. Q. sumichrasti, De Sauss.

Fam. Corvide.
69. Cyanocitta diademata, Bp.

This species agrees with one in my collection which I have called diademata, as apparently the bird indicated by Prince Bonaparte in his 'Conspectus' (p.377) under that name. But I am not without suspicion that Bonaparte has misplaced the two names, and that his diademata is the true coronata of Swainson, being the bird of the tableland, while C. coronata (as described by Bonaparte) inhabits the tierra caliente and descends to Guatemala.
70. Cyanocitta unicolor (Du Bus).
71. C. ornata (Less.).
72. Cyanocorax luxuosus (Less.).

Fam. Dendrocolaptide.
73. Sclerurus mexicanus, Sclater.
74. Automolus cervinigularis, Sclater.
75. Sittasomus sylvioides, Lafi.
76. Picolaptes affinis (Lafr.).

Fam. Formicaridde.
77. Grallaria mexicana, Sclater.

Fam. Tyrannide.
78. Sayornis nigricans (Sw.).
79. Legatus variegatus, Sclater.
80. Myiozetetes texensis (Giraud).
81. Pitangus derbianus (Kaup).
82. Myiodynastes luteiventris (Bp.).
83. Pyrocephalus mexicańus, Sclater.
84. P. obscurus, Gould.

I think it probable that this very curious bird (which is of a uniform chocolate-colour, with one or two scattered scarlet points and a rosy tinge on the vent) may be an abnormal form of Pyrocephalus mexicanus; for I have never seen it in any other plumage, and it seems evidently not in adult dress. This is the first example of it I have seen from Mexico.
85. Tyrannus vociferans, Sw.

Fam. Сotingide.
86. Tityra personata, Jard. \& Selb.
87. Hadrostomus aglaife (Lafr.).
88. Pachyrhamphus major (Cab.).

Fam. Momotide.
89. Momotus ceruleiceps, Gould.

Fam. Alcedinide.
90. Chloroceryle cabanisi (Tsch.).
91. C. superciliosa (Linu.).

Fam. Trogonide.
92. Trogon caligatus, Gould.
93. T. puella, Gould.

## Fam. Caprimulgide.

94. Nyctidromus guianensis (Gm.).

Fam. Trochilide.
95. Campylopterus hemileucurus (Licht.).
96. Eugenes fulgens (Sw.).
97. Lamprolema rhami (Less.).
98. Heliopedica melanotis (Sw.).
99. Trochilus colubris, Linn.
100. T. alexandri, Bourc. \& Muls.
101. Selasphorus rufus (Gm.).
102. S. platycercus (Sw.).
103. S. heloise (Less. \& Delattr.).
104. Calothorax lucifer (Sw.).
105. Petasophora thalassina (Sw.).
106. Amazilia beryllina (Licht.).

Mr. White informs me that this species is very abundant in the gardens in the city of Mexico.
107. Circe latirostris (Sw.).

Fam. Cuculide.
108. Piaya mehleri, Bp.
109. Coccyzus americanus (Linn.).
110. Geococcyx mexicanus (Gm).

Fam. Ramphastide.
111. Aulacorhamphus prasinus (Licht.).

## Fam. Picide.

112. Campephilus guatemalensis (Iartl.).
113. Picus bairdi, Sclater.
114. P. Jardinif, Malh.
115. Sphyropicus varius (Linn.).
116. Chloronerpes oleagineus (Licht.).
117. C. aruginosus (Licht.).
118. Melanerpes formicivorus (Siw.).
119. Centurus santacruzi, Bp.
120. C. elegans (Sw.).
121. Colaptes mexicanus (Sw.).

> Fam. Psittacide.
122. Conurus holochlorus, Sclater.
123. C. lineola, Cassin.

Psittacula lineola, Cassin, Pr. Acad. Philad. vi. p. 372.
Myiops catharina, Bp. C. R. xliv. p. 538.
Proc. Zool. Soc.—1864, No. XII.

There can be no donbt that Prince Bonaparte's Myiops catharina is identical with Mr. Cassin's Psittacula lineola, the type of the latter having been obtained at Puente Nacional in Mexico. Whether the Venezuelan Myiopsitta tigrina, Sonancé (Rev. de Zool. 1856, p. 144), is distinct I am not able to say, never having seen Venezuelan examples of this form.

Order Accipitres.
124. Tinnunculus sparverius (Lim.).
125. Asturina magnirostris (Gm.).
126. A. nitida (Lath.).
127. Accipiter fuscus (Gm.).
128. Circus hudsonicus (Limi.).
129. Scops flammeola, Kaup.

Order Columbe.
130. Columba flavirostris, Wagl.
131. Leptoptila albifrons, Bp.
132. Melopelia leucoptera.
133. Peristera cinerea.
134. Scardafella inca, Bp.
135. Chameopelia passerina.

Order Galline.
136. Philortyx fasciatus.
137. Dendrortyx macrurus.

Order Gralle.
138. Squatarola helvetica (Lin.): Baird, B. N. Am. p. 697. I have not previously seen Mexican examples of this widely diffused species.
139. Ægialites vociferus (Linn.).
140. Himantopus nigricollis (Vieill.).
141. Rhyacophilus solitarius (Wils.).
142. Tringoides macularius (Linn.).
143. Tringa wilsoni (Nutt.) : Baird, B. N. Am. p. 721.
144. Gallinago wilsoni, Bp.
145. Numenius longirostris (Wils.).

## 146. Phalaropus wilsoni, Sabine.

A specimen of this beautiful bird in full summer plumage.
147. Garzetta candidissima (Gm.).
148. Ibis ordiI, Bp.
149. Rallus longirostris (Bodd.).
150. Porzana carolina (Linn.).
151. Gallinula martinica (Linn.).
152. Fulica americana, Gm.

## Order Anseres.

153. Chroicocephalus atricilla (Lini.).
154. Hydrochelidon plumbea (Wils.).
155. Rhynchops nigra, Lind.
156. Podiceps califonnicus, Heerm. Proc. Acad. Phil. 1854, p. 179; Coules, ibid. 1862, p. 231.

This bird is very closely allied to the European $P$. nigricolliscommonly but erroneously called $P$. auritus. Mr. Coues has pointed out, $l$. $c$., the sleuder differences that distinguish the two birds. Mr. White's collection contains one example of this Grebe in full summer plumage. I have not before seen it from Mexico.

## 3. Description of a New Species of Elaps from Malabar. By Capt. R. H. Beddome, Officiating Conservator of Forests, Madras.

## Elaps cerasinus.

Rostral slightly produced back between the anterior frontals ; anterior frontals only half the size of the posterior ones, the latter touch the orbit; no anteocular and no loreal nostril between two nasals ; seven upper labials; third, fourth, and fifth very high ; third and fourth enter the orbit; one small postocular, vertical, six-sided, elongated, pointed behind ; superciliaries small; occipitals large, elongated, pointed behind, with a pair of large temporals on the side of each; anal entire. Back purplish brown, with a shining nacreous lustre, with transverse, broad, irregular-shaped, black bands extending to the tip of the tail (about forty) at nearly equal distances, and which are continned, though not so broad, underneath the belly and tail, but never quite meet. Sides (two or two and a half of the lowest row of scales) and belly of a brilliant cherry-colour; head black in front ; neek with the fifth, sisth, and seventh labials and a portion of the occipitals cherry-coloured. Total length $21 \frac{1}{2}$ inches; girth
$1 \frac{1}{8}$ inch ; length of tail 2 inches. Abdominails 228 ; subcaudals 31 ; rows of scales 13 .

Hab. Manantoddy (Malabar). Rare.
This species differs from all others of the genus in the absence of an anteocular shield.

## 4. Description of Three New Śpecies of Australian Snakes. By Gerard Krefft.

Simotes australis, sp. nov.
Scales in 17 rows. Ventrals 160 to 163 . Anal bifid. Subcaudals 18/18. Total length $11 \frac{1^{\prime \prime}}{}$; tail $1 \frac{1^{\prime \prime}}{8}$.


Body cylindrical, rounded; head short, conical, not distinct from neck; tail short, ending in a blunt point. Rostral shicld much produced, flat in front, pointed behind, reaching backwards to between the anterior frontals, slightly grooved at its base. Two nasals, nostrils between, one anterior, two posterior oculars; two temporals (in oue specimen a third smaller one behind). Eye small; pupil subelliptical, erect; no loreal, replaced by the posterior nasal and anterior ocular; six upper labials, the third and fourth coming into the orbit ; occipitals short, not much rounded behind, and but slightly forked. The general colour is red, very bright on the posterior part of the body and tail; all the scales are slightly margined, some, much darker than others, have a whitish (in spirits) spot in the middle, and form into a series of half rings, of which there are about fiftysix upon the body and tail. The head is covered by a black band across the occiput, leaving the snout free, commencing from below the eye, and marking the fourth and fifth upper labials, the vertical, and nearly the whole of the occipitals; this black band is divided from a second band covering the neck by a whitish space.

I believe the present species is the first Simotes discovered in Australia; and I am much indebted to Dr. James C. Cox, who found it in the neighbourhood of Port Curtis. A second specimen, taken on the bauks of the Clarence River, was given to me a few days ago by Judge Francis.

Hoplocephalus ramsayi, sp. nov.
Scales in 15 rows, Anal bifid. Ventrals 164. Subcaudals 51. Total leugth $10 \frac{1_{2}^{\prime \prime}}{}$; tail $2^{\prime \prime}$.

Body rather elongate and rounded; head scarcely distinct from neck, rather high and elongate, with obtuse muzzle ; rostral just

reaching to the surface of crown; anterior frontals moderate, rounded in front; posterior ones larger, bent down on the sides; one anterior, two posterior oculars, the lower forming about one-fourth of the orbit; vertical narrow, six-sided, much longer than broad; superciliaries nearly the same size as the vertical ; occipitals moderate, not forked behind; six upper labials, the third and fourth forming the lower part of the orbit; no loreal, replaced by the elongate nasal, second and third upper labial, anterior ocular, and bent down anterior frontal. One nasal, pierced by the nostril ; scales moderate, rhomboid, in fifteen rows; tail rather short, scarcely distinct from trunk, tapering; eye moderate, pupil rounded; grooved fang in front, some smaller smooth teeth behind.

Dark olive-green above, each scale tipped with reddish, in particular those on the sides; crown and a narrow vertebral line, one scale wide, somewhat darker than the other parts; this line extends to the root of the tail ; upper labials and chiu-shields whitish, marked with olive-brown in the upper corners. Beneath yellow, each ventral scale with a blackish margin; subcaudals nearly black.

Mr. E. P. Ramsay discovered this new Suake in the neighbourhood of Braidwood, N. S. Wales ; it is apparently a young specimen, its total leugth not exceeding $10 \frac{1}{2}$ inches.

## Hoplocephalus nigro-striatus, sp. nov.

Scales in 15 rows. Anal entire. Ventrals 180. Subcaudals 62. Total length $11^{\prime \prime}$; tail $2 \frac{1}{2}{ }^{\prime \prime}$.

Body and tail as in H. nigrescens; belly flat; tail moderate, not distinct from trunk; head not distinct from neck, depressed, rounded; rostral moderate ; anterior froutals broad, hinder edges just touching the nostril ; posterior frontals much larger, rounded behind; vertical moderate, six-sided, very broad; occipitals rather narrow, elongate, much forked aud pointed behind; one anterior, two posterior oculars; superciliaries and eyes small; pupil elliptical, erect; six upper. labials, third and fourth touching the eye. Upper part of posterior half of tail covered with large hexagonal scales ; sides and beneath
yellowish white ; crown and a vertebral line ruming from the neck to the tip of the tail black.

Hab. North-east Australia, neighbourhood of Rockhampton.

## 5. Notes on Australian Freshwater Fishes, and Descriptions of Four New Species. By Gerard Krefft.

The scanty knowledge which we possess of the fishes inhabiting our freshwater streams has induced me to pay some attention to this subject; and I now furnish a list of species of the several rivers from which I have received specimens. To begin with our immediate neighbourhood, I find that up to the present time not more than four species have been captured in the streams emptying into Port Jackson and Botany Bay :- mamely, Eleotris australis, sp. nov.; Mugil dobula, Gthr.; Anyuilla australis, Rich.; and Galaxias scriba. These four species we find in almost every stream, swamp, and lagoon, Galaxias scriba even in old wells or other water-holes on the top of hills, which have no comexion with any of the running streans. Anguilla australis is also frequently found in detached pools of water; whilst Eleotris australis frequents the clearer streamlets. I have never had an opportunity of examining the creeks which are situated upon the north shore of Port Jackson, nor have I ever received specimens captured there; but I have reason to believe that, besides the four kinds of fish mentioned, there exists a larger freshwater species, cominonly called "Perch," probably a Therapon, which is not found in the salt water of the harbour.

With regard to the fishes of the Nepean or Hawkesbury, its tributaries, and the swamps and lagoons with which this river is occasionaily commected during high floods, I am enabled to give a better account. I have drawn the seine in the Hawkesbury between Windsor and Richmond, about fifty miles from its mouth, where the water is as fresh as that of any mountain-stream; and the result was, at a haul, about 200 so-called " Mullets" (two species, Mugil dobula, Gthr., and Mugil compressus, Gthr.), two "Eels" (Anguilla australis, Rich.), a "Perch" (Lates colonorum, Gthr., Ann. N. H. 1863, xi. p. 114), and a "Rock Cod" (Dertropogon robustus, Gthr.). How this last fish managed to go so far up a freshwater river I could not understand. It has all the appearance of a true sea-fish ; and yet I took it subsequently much further up the river, between the mountains, whilst I have also received two specimens captured with hook and line in Mr. Pitt's lagoon near Bronte-a lagoon which, Mr. Pitt informs me, has not been flooded during the last four years. There is another fish, called a "Bream" by the settlers, which we did not succeed in capturing (this is probably Beryx affinis), and a second species of Perch, which may prove to be new. At a second haul a true Flat-head (Platycephalus tasmanius, Rich.) was secured, besides the nsual amount of "Mullet" and "Perch." The smaller fry, as Galaxius scriba, Rich., and the so-called Sprat
(Megalops setipinnis, Rich.), were taken with hook and line. The last-mentioned species affords a good deal of sport, as it will rise to a fly. I mention this fact, as some authors have denied that fly-fishing existed in Australia.

The genus Eleotris I found well represented in this river ; aud I give a short description of four new species.

Eleotris coxil, sp. nov.
D. C. $\frac{1}{9}$. A. $1 / 9$. L. lat. 36 to 38.

Twelve series of scales between the origin of the posterior dorsal and the anal. Head scaly ; snout obtuse, with the lower jaw prominent. The height of the body is contained five times and a quarter in the total length; the length of the head more than four times; the horizontal diameter of the eye is one-fourth of the length of the head, and equal to the width of the interorbital space.

Coloration bright yellow; upper part and sides finely punctured with black, forning a broad, sometimes indistinct streak upon the sides. Dorsals and pectorals bright yellow at the base, the first punctured with black; belly whitish. Teeth villiform, in broad bauds. Anal papilla large, somewhat longer than broad.

Total length $5 \frac{1}{2}$ inches.
Hab. Lagoon near Bronte, Upyer Hawkesbury River.
Eleotris australis, sp. nov.
D. $7 \frac{1}{8}$. A. $\frac{1}{8}$. L. lat. 32 .

Eight series of scales between the origin of the posterior dorsal fin and the anal. Head scaly, as far as the snout, obtuse; lower jaw prominent; teeth in villiform bands. The height of the body is contained four times and a half in the total length, and the head four times and a quarter ; the horizontal diameter of the eye is onehalf the width of the interorbital space. General coloration yellowish brown, covered with minute black spots, which form five or six longitudinal lines upon the sides; base of pectorals with a narrow bright yellow band; all the rays of the caudal spotted with black ; second dorsal with three or four narrow, sometimes indistinct bands. Anal papilla as long as the horizontal diameter of the eye, and nearly as broad. Total length 5 inches.

Hab. Creeks near Sydney, Hawkesbury River and its tributaries, Hunter River, and Clarence River.

Eleotris grandiceps, sp. nov.
D. $71 / 9$. A. $\frac{1}{9}$. L. lat. 38 to 40 .

Twelve series of scales between the origin of the posterior dorsal fin and the anal. Head very large, broad, depressed, without any apparent seales; lower jaw prominent; tecth villiform. The height of the body is contained five times in the total length, and that of the head three times and a half. The diameter of the eye is onefifth of the length of the head, and nearly one-half of the interorbital
space ; the pectorals reach to the origin of the anal fin. General coloration yellowish, punctured with black in particular on the upper part and sides ; snout blackish; lower jaw sometimes punctured with black also ; beneath whitish. Anal papilla very small. Total length $3 \frac{1}{2}$ inches.

Hab. Upper Hawkesbury River; freshwater lagoons near Bronte and Richmond, Eastern Creek, and other tributaries of the Hawkesbury.

There are just twelve species of fishes from the Nepean and Hawkesbury ; but I am assured by Mr. George M. Pitt, jun., to whom I am chiefly indebted for my specimens, that the river contains more than twenty different kinds of fish : the remaining species I hope to capture during the course of this summer, and I shall furnish an account of them in due time. Of our northern rivers, the Hastings, the Richmond, and the Clarence, I know but little; that they team with fish there is no doubt, and that many now genera and species will be found amongst them is certain. Many of the settlers upon the banks of these streams have promised their cooperation ; and Mr. Jannes F. Wilcox, who resides on the Clarence River, has supplied me already with many interesting specimens. I received from him Oligorus macquariensis, Cuv. \& Val., Therapon unicolor (?), Galaxias scriba, Rich., Eleotris mogunda, Rich., and E. compressus, sp. nov., which may be described as follows :-

Eleotris compressus, sp. nov.

$$
\text { D. C. } \frac{1}{9} \text { to } 10 . \text { A. } \frac{1}{10} \quad \text { L. lat. } 28 / 30 .
$$

Eight series of scales between the origin of the posterior dorsal fin and the anal. Body cyprinoid, compressed; the height of the body is contained three times and three-quarters in the total length, and the head four times ; the horizontal diameter of the eye is one-fourth of the length of the head, and is contained once and a half in the interorbital space; the snout is short, lower jaw longest; mouth rather small; head scaly.

Coloration reddish brown, with five or six indistinct cross bands, formed of the close-dotted black spots with which the scales are covered. The second dorsal and the anal are rather long, and more or less marked with black at the base and top; besides this, the hinder part of the second dorsal is speckled with white. Anal papilla of moderate size and forked. Total length $3 \frac{1}{2}$ inches.

Hab. Clarence River, and creeks near Port Denison. Discovered by Mr. James F. Wilcox.

## 6. Description of a New Species of the Genus Mergus. By John Gould, F.R.S., etc.

## Mergus squamatus, Gould.

Crown of the head, lengthened crest, and neck rusty brown; upper surface brownish grey; tuft of feathers at the insertion of the wing
grey, passing into white near the tip, and broadly margined with black; lesser wing-coverts grey; greater coverts grey at the base, passing into black about the middle of the feathers, beyond which they are creamy white; primaries very dark or blackish brown; lower part of the throat and all the under surface pale buff; sides of the breast and the whole of the flanks down to the tail deep rich buff, with two narrow irregular crescentic bands of blackish brown on each feather, one within the other, the outer one near the edge, the inner one near the middle; a similar style of marking pervades the space behind the legs, the lower part of the back, and the upper tail-corerts, but the markings in those parts are wider, of a greyer tint, and intermingled with each other; tail greyish brown, the central feathers freckled on their margins with greyish white.

Total length 23 inches; bill $2 \frac{3}{4}$; wing 10 ; tail $4 \frac{1}{2}$; tarsi 2 .
Hab. China.
Remark. -The above description was taken from an example which I consider to be cither immature or in its winter livery. In size it is intermediate between Mergus castor and M. merganser. Whenever a specimen is procured in its nuptial dress, it will doubtless prove to be a bird of great beauty. This new species is at once distinguished from the other members of its genus by the squamate form of the markings on the flanks, which has suggested the specific name assigned to it.

May 10, 186.

Dr. E. Hamilton in the Chair.

The following papers were read :-

## 1. On a New Rat from Formosa. By Robert Swinioe, F.Z.S.

Mus coninga, n. sp.
M. corpore supra rufo, setis nigris spinosis sparso, subtus abrupte allo: auribus rotundis, fuscis : cauda longa, squamosa, setosa: pedibus albis.
Corp. long. 8 poll., caud. 9 poll.
Upper parts reddish brown, sprinkled with stiff black bristles, more especially ou the back, where the fur is also often a little dark ; ears and fore part of legs deep brown ; tail composed of short rings of scales set with short stiff bristles, deep brown on its upper parts, whitish on the lower and for about $1 \frac{3}{4}$ inch of tip; a ring of black runs round the lids of the eye; whiskers on sides of muzzle and a few hairs on sides of the forehead rery long and glossy black; fore teeth rufous sieuna, those on lower jaw long ; chin, breast, under

